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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/580,829	01/03/2007	Yoshihisa Doi	65341.00008	7066

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EXAMINER	
WEISS, PAMELA HL	

ART UNIT	PAPER NUMBER
1797	

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12/26/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/580,829	DOI ET AL.	
	Examiner	Art Unit	
	PAMELA WEISS	4153	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-6* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-6* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *05/26/2006*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Information Disclosure Statement

1. The references 5 279689 (10/26/1993 JP) and 108085 (1/13/1998 JP) in the information disclosure statement filed May 26, 2006 fails to comply with 37 CFR 1.98(a)(3) because it does not include a concise explanation of the relevance, as it is presently understood by the individual designated in 37 CFR 1.56(c) most knowledgeable about the content of the information, as each patent listed that is not in the English language. It has been placed in the application file, but the information referred to therein has not been considered.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 6 provides for the use of an aqueous lubricant composition, but, since the claim does not set forth any steps involved in the method/process, it is unclear what method/process applicant is intending to encompass. A claim is indefinite where it merely recites a use without any active, positive steps delimiting how this use is actually practiced.

Claim 6 is rejected under 35 U.S.C. 101 because the claimed recitation of a use, without setting forth any steps involved in the process, results in an improper definition of a process, i.e., results in a claim which is not a proper process claim under 35 U.S.C. 101. See for example *Ex parte Dunki*, 153 USPQ 678 (Bd.App. 1967) and *Clinical Products, Ltd.* v. *Brenner*, 255 F. Supp. 131, 149 USPQ 475 (D.D.C. 1966).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. Claims 1-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Forsberg (Re36,479) in view of Yamamoto et al (US 4,256,591).

Regarding Claim 1:

Forsberg discloses an aqueous lubricant comprising

(a) a solid lubricating agent; (molybdenum disulfide C31 L25-28)

Forsberg does not explicitly disclose the amount of molybdenum disulfide solid lubricating agent as 10 to 40% by mass.

Forsberg also discloses that the functionally effective amount of the functional additive should be present so as to impart the desired properties intended by the addition of said additive. (C32 L57-68) It is the examiner's position that the concentration of molybdenum disulfide is therefore a result effective variable because changing it will clearly affect the type of product obtained. See MPEP § 2144.05 (B). Case law holds that "discovery of an optimum value of a result effective variable in a known process is ordinarily within the skill of the art." See *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

It therefore would have been obvious to a person having ordinary skill in the art at the time of invention to use an amount of molybdenum disulfide sufficient to provide the appropriate lubricating properties.

(b) Forsberg discloses isobutylene maleic anhydride copolymer (i.e. attaching agent having both lubricating and dispersing properties) (C27 L8) in the amount of 0.1 to about 10% by weight (C31 L4-9)

Forsberg does not explicitly disclose 2 to 20% by mass of an attaching agent having both lubricating and dispersing properties.

Forsberg discloses the amount of the attaching agent within/overlapping the claimed ranges. See MPEP 2144.05(I): "In the case where the claimed ranges "overlap or lie inside ranges disclosed by the prior art" a prima facie case of obviousness exists. *In re Wertheim*, 541 F.2d 257, 191 USPQ 90 (CCPA 1976);"

Forsberg et al. discloses the use of alkylene glycols (C8 L47-51) in forming a nitrogen containing salt in an aqueous composition.

Forsberg et al. does not explicitly disclose (c) 2 to 20% by mass of an agent having both wetting characteristics and moisture evaporation-accelerating actions; and water.

Yammamoto et al discloses alkylene glycols (ethylene glycol, propylene glycol, etc. C6 L25-30) as an aqueous dispersion medium.

Yammamoto et al. and Forsberg et al. are analogous because both references are directed to aqueous lubricants containing a solid lubricant and an isobutylene copolymer.

It would have been obvious to a person having ordinary skill in the art at the time of invention to use the alkylene glycol of Yammamoto et al. in an effective amount in the aqueous lubricant of Forsberg et al. to improve the dispersion qualities of the aqueous lubricant composition.

Forsberg does not disclose the aqueous lubricant for plastic working. Plastic working is part of the preamble and is merely the intended use of the composition. A preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the

claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See In re Hirao, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and Kropa v. Robie, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951).

Regarding Claim 2

Forsberg and Yammamoto disclose the limitations set forth above. Forsberg and Yammamoto also disclose the aqueous lubricant, wherein the solid lubricating agent (a) comprises molybdenum disulfide.(Forsberg C31 L25-28)

Regarding Claim 3:

Forsberg and Yammamoto disclose the limitations set forth above. Forsberg and Yammamoto also disclose the aqueous lubricant wherein the attaching agent (b) having both lubricating and dispersing properties comprises an isobutylene-maleic acid copolymer. (C27 L8)

Regarding Claim 4.

Forsberg and Yammamoto discloses the limitations set forth above. Forsberg also discloses the use of alkylene glycols (C8 L47-51) in forming a nitrogen containing salt in an aqueous composition.

Forsberg does not explicitly disclose the agent having both wetting characteristics and moisture evaporation accelerating actions comprising alkylene glycols.

Yammamoto et al discloses alkylene glycols (ethylene glycol, propylene glycol, etc. C6 L25-30) as an aqueous dispersion medium.

It would have been obvious to a person having ordinary skill in the art at the time of invention to use the alkylene glycol of Yammamoto et al. in an effective amount in the aqueous lubricant of Forsberg et al. to improve the dispersion qualities of the aqueous lubricant composition.

Regarding Claim 5.

Forsberg and Yammamoto disclose the composition of claim 5, as discussed for claims 2-4 above.

Regarding Claim 6:

Forsberg and Yammamoto disclose the limitations set forth above. Forsberg and Yammamoto disclose an aqueous lubricant meeting the compositional limitations of the claimed lubricants, which will therefore be capable of being used for plastic working wherein the plastic working is cold forging.

Further, a recitation directed to the manner in which a claimed apparatus is intended to be used does not distinguish the claimed apparatus from the prior art, if the prior art has the capability to so perform.

Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to PAMELA WEISS whose telephone number is (571)270-7057. The examiner can normally be reached on Mon.-Thur. 7:30am-5:00pm Alt. Fri. 7:30am-4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn A. Caldarola can be reached on (571) 272-1444. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

PW

/Glenn A Caldarola/
Acting SPE of Art Unit 1797